

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/51106

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C10G65/04 C10G69/12 C10G67/02 C10G2/00 C07C1/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C10G C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 3 239 455 A (BROUGHTON DONALD B ET AL) 8 March 1966 (1966-03-08) column 1, line 31 - line 67 column 3, line 58 - line 67 column 5, line 48 - line 72 column 6, line 49 - column 7, line 59; claims 1,2	1-3, 9, 10, 12 1, 2, 4-9, 11
X Y	US 6 392 109 B1 (O'REAR DENNIS J ET AL) 21 May 2002 (2002-05-21) column 2, line 58 - line 65 column 16, line 14 - column 17, line 22; claims 1, 4, 5, 8; figure 1 column 8, line 27 - line 33 column 6, line 9 - line 59	6 1, 2, 4-6, 8, 9, 11
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

10 May 2004

Date of mailing of the international search report

17/05/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 990 744 A (UNIVERSAL OIL PROD CO) 28 April 1965 (1965-04-28) page 3, line 53 - line 58 page 5, line 30 - page 6, line 57; claims 1,2,4-6; example 1	1,2,7
A	US 2002/128530 A1 (KRUG RUSSELL R ET AL) 12 September 2002 (2002-09-12) page 1, paragraph 12 - page 3, paragraph 52; claims 1-6,14,21,22	1-12

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Information on patent family members

International Application No

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